



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,219	08/28/2003	Robert Sesek	200206922-1	7112
22879	7590	06/19/2007	EXAMINER	
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			LAM, HUNG H	
ART UNIT	PAPER NUMBER			
	2622			
MAIL DATE	DELIVERY MODE			
06/19/2007	PAPER			

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/650,219	SESEK ET AL.
	Examiner	Art Unit
	Hung H. Lam	2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-21 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-21 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 28 August 2003 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____

5) Notice of Informal Patent Application

6) Other: _____

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-13, 15-17 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Imagawa (US-6,657,666).

With regarding **claim 1**, Imagawa discloses a method of capturing photographic image information, comprising:

providing a camera with a global positioning system receiver (position detection 2; Col. 4, Ln. 60-67);

capturing an image with the camera(Fig. 1; image information input device 1; Col. 4, Ln. 41-48);

determining a position of an object of the captured image (distance detector 3; Col. 4, Ln. 60-67); and

storing data indicative of the position of the object of the captured image with the image (recorder 8; Col. 5, Ln. 40-67).

With regarding **claim 2**, Imagawa discloses the method wherein the image is digital (Col. 4, Ln. 30-67; Col. 5, Ln. 40-67).

With regarding **claim 3**, Imagawa discloses the method wherein determining a position of the captured image comprises:

obtaining global position coordinates of the camera (position detection 2; Col. 4, Ln. 60-67);

obtaining a range from the camera to the object (distance detector 3; Col. 4, Ln. 60-67);

obtaining a magnetic bearing of the object (Fig. 1; direction detector 4; Col. 5, Ln. 1-24; a compass is inherently included in order to detect the direction); and

calculating the position of the object of the captured image by translating the range and magnetic bearing from the global position coordinates to provide coordinates of the object (abstract; Col. 1, Ln. 19-65; Col. 5, Ln. 1-Col. 6, Ln. 64).

With regarding **claim 4**, Imagawa discloses the method and further comprising: associating captured data with a physical description of the subject of the captured image (Fig. 3-4; Col. 5, Ln. 1-50; Col. 7, Ln. 40-Col. 8, Ln. 67).

With regarding **claim 5**, Imagawa discloses the method wherein associating captured data with a physical description of the subject of the captured image comprises:

comparing the coordinates of the object of the photograph to a set of known coordinates (Col. 1, Ln. 40-Col. 2, Ln. 5; Col. 5, Ln. 55-Col. 6, Ln. 65; Col. 7, Ln. 51-Col. 8, Ln. 67); and

embedding with the captured data textual information about objects having known coordinates corresponding to the coordinates of the object (Fig. 3-4; Col. 5, Ln. 55-Col. 6, Ln. 65; Col. 7, Ln. 51-Col. 8, Ln. 67).

With regarding **claim 6**, Imagawa discloses the method wherein embedding further comprises retrieving textual information about the object at the known coordinates (Fig. 3-4; Col. 5, Ln. 55-Col. 6, Ln. 65; Col. 7, Ln. 51-Col. 8, Ln. 67).

With regarding **claim 7**, Imagawa discloses the method further comprising: associating captured data with a physical description of the subject of the captured image (abstract; Fig. 3-4; Col. 5, Ln. 55-Col. 6, Ln. 65; Col. 7, Ln. 51-Col. 8, Ln. 67).

With regarding **claim 8**, Imagawa discloses the method wherein associating captured data with a physical description of the subject of the captured image comprises:

comparing the coordinates of the object of the photograph to a set of known coordinates (Col. 1, Ln. 40-Col. 2, Ln. 5; Col. 5, Ln. 55-Col. 6, Ln. 65; Col. 7, Ln. 51-Col. 8, Ln. 67); and

embedding with the captured data textual information about objects having known coordinates corresponding to the coordinates of the object (Fig. 3-4; Col. 5, Ln. 55-Col. 6, Ln. 65; Col. 7, Ln. 51-Col. 8, Ln. 67).

With regarding **claim 9**, Imagawa discloses a method of capturing photographic image information, comprising:

providing a camera with a global positioning system receiver (position detection 2; Col. 4, Ln. 60-67);

capturing an image with the camera (Fig. 1; image information input device 1; Col. 4, Ln. 41-48);

obtaining global position coordinates of the camera (position detection 2; Col. 4, Ln. 60-67);

obtaining a range from the camera to the object (distance detector 3; Col. 4, Ln. 60-67);

obtaining a magnetic bearing of the object (Fig. 1; direction detector 4; Col. 5, Ln. 1-24; a compass is inherently included in order to detect the direction);

calculating the position of the object of the captured image by translating the range and magnetic bearing from the global position coordinates to provide coordinates of the object (distance detector 3; Col. 1, Ln. 19-65; Col. 4, Ln. 60-67; abstract; Col. 7, Ln. 1-62);

storing data indicative of the position of the object of the captured image with the image (recorder 8; Col. 5, Ln. 40-67); and

associating captured data with a physical description of the subject of the captured image (Fig. 3-4; Col. 5, Ln. 55-Col. 6, Ln. 65; Col. 7, Ln. 51-Col. 8, Ln. 67).

With regarding **claim 10**, Imagawa discloses a method of associating textual information about an object in a photograph, comprising:

obtaining captured coordinates of the object from the captured data for the image (Col. 4, Ln. 60-Col.5, Ln. 67);

comparing the coordinates to a database of known coordinates (Col. 5, Ln. 1-43);

retrieving appropriate textual data to the captured coordinates (Col. 5, Ln. 1-67); and

embedding with the captured data the retrieved textual information about objects having known coordinates corresponding to the captured coordinates (Fig. 3-4; Col. 5, Ln. 34-Col. 6, Ln. 65; Col. 7, Ln. 51-Col. 8, Ln. 67).

With regarding **claim 11**, Imagawa discloses a method wherein obtaining captured coordinates of the object comprises:

downloading captured data for an image from a camera that took the image (Fig. 1; see position detector 2; distance detector 3; direction detector 4 and memory 5).

With regarding **claim 12**, Imagawa discloses a camera, comprising:

a processor (Col. 1, Ln. 7-17; Col. 4, Ln. 30-37; a processor is broadly interpreted as shot place and object extractor 6-7);

an image data capture module connected to the processor (Fig. 1; image information input device 1; Col. 4, Ln. 41-48), the image data capture module to capture image data corresponding to a position of an object of a photograph taken by the camera (Fig. 3; Col. 4, Ln. 31-67); and

a storage element connected to the processor for storing images and captured image data (Fig. 1; recorder 8).

With regarding **claim 13**, Imagawa discloses a camera wherein the image data capture module comprises:

a global positioning system to record coordinates of the camera when a photograph is taken (position detection 2; Col. 4, Ln. 60-67);

a range finder to record a range to the object of the photograph when the photograph is taken (distance detector 3; Col. 4, Ln. 60-67); and

a compass to record a magnetic bearing of the object of the photograph when the photograph is taken (Fig. 1; direction detector 4; Col. 5, Ln. 1-24; a compass is inherently included in order to detect the direction).

With regarding **claim 15**, Imagawa discloses a camera A camera, comprising:
a processor (Col. 1, Ln. 7-17; Col. 4, Ln. 30-37; a processor is broadly interpreted as shot place and object extractor 6-7);

an image data capture module connected to the processor (Fig. 1; image information input device 1; Col. 4, Ln. 41-48), the image data capture module to capture image data corresponding to a position of an object of a photograph taken by the camera, the image data capture module comprising (Fig. 3; Col. 4, Ln. 31-67):

a global positioning system to record coordinates of the camera when a photograph is taken (position detection 2; Col. 4, Ln. 60-67);

a range finder to record a range to the object of the photograph when the photograph is taken (abstract; distance detector 3; Col. 4, Ln. 60-67); and

a compass to record a magnetic bearing of the object of the photograph when the photograph is taken (Fig. 1; direction detector 4; Col. 5, Ln. 1-24; a compass is inherently included in order to detect the direction); and

a storage element connected to the processor for storing images and captured image data (Fig. 1; recorder 8).

With regarding **claim 16**, Imagawa discloses a camera comprising:

a processor (Col. 1, Ln. 7-17; Col. 4, Ln. 30-37; a processor is broadly interpreted as shot place and object extractor 6-7);

a storage element (recorder 8) connected to the processor for storing images and image information (see Fig. 1); and means for storing image data corresponding to a position of an object of a photograph taken by the camera (recorder 8; Col. 5, Ln. 40-67).

With regarding **claim 17**, Imagawa discloses an image data capture module, comprising:

a global positioning system to record coordinates of a camera when a photograph is taken (position detection 2; Col. 4, Ln. 60-67);

a range finder to record a range to an object of the photograph when the photograph is taken (abstract; distance detector 3; Col. 4, Ln. 60-67); and

a compass to record a magnetic bearing of the object of the photograph when the photograph is taken (Fig. 1; direction detector 4; Col. 5, Ln. 1-24; a compass is inherently included in order to detect the direction).

With regarding **claim 20**, Imagawa discloses an image data capture module for a camera with a global positioning system, the image data capture module comprising:

a range finder to record a range to an object of a photograph when the photograph is taken (abstract; distance detector 3; Col. 4, Ln. 60-67); and

a compass to record a magnetic bearing of the object of the photograph when the photograph is taken (Fig. 1; direction detector 4; Col. 5, Ln. 1-24; a compass is inherently included in order to detect the direction).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 14, 18, 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imagawa in view of Mower (US-6,930,715).

With regarding claim 14, Imagawa fails to explicitly disclose the camera of claim 13, wherein the image data capture module further comprises: an inclinometer to record an inclination with respect to level of the camera when a photograph is taken.

In the same field of endeavor, Mower teaches a mobile imaging system comprising GPS, compass and inclinometer (Fig. 2; 210) wherein the compass and inclinometer provide a horizontal look direction for the image capturing device and a vertical direction therefor, respectively (Col. 4, Ln. 55-60). Mower further teaches that the invention satisfies the need to improve upon the use of maps by a remote viewer of a scene and provides a way of augmenting an image of a scene with information about the scene (Col. 1, Ln. 50-57). In light of the teaching from Mower, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Imagawa by including the compact and inclinometer of Mower's in order to provide a horizontal look direction for the image capturing device and a vertical direction. The modifications thus satisfy the need to improve upon the use of maps by a remote viewer of a scene and provide a way of augmenting an image of a scene with information about the scene (Mower: Col. 1, Ln. 50-57).

With regarding **claim 18**, the claim contains the same limitations as claimed in claim 14. Therefore, claim 18 is analyzed and rejected as previously discussed in claim 14.

With regarding **claim 19**, Imagawa discloses an image data capture module, comprising:

a global positioning system to record coordinates of a camera when a photograph is taken (position detection 2; Col. 4, Ln. 60-67);

a range finder to record a range to an object of the photograph when the photograph is taken (abstract; distance detector 3; Col. 4, Ln. 60-67);

a compass to record a magnetic bearing of the object of the photograph when the photograph is taken (Fig. 1; direction detector 4; Col. 5, Ln. 1-24; a compass is inherently included in order to detect the direction); and

However, Imagawa fails to explicitly disclose an inclinometer to record an inclination with respect to level of the camera when a photograph is taken.

In the same field of endeavor, Mower teaches a mobile imaging system comprising GPS, compass and inclinometer (Fig. 2; 210) wherein the compass and inclinometer provide a horizontal look direction for the image capturing device and a vertical direction therefor, respectively (Col. 4, Ln. 55-60). Mower further teaches that the invention satisfies the need to improve upon the use of maps by a remote viewer of a scene and provides a way of augmenting an image of a scene with information about the scene (Col. 1, Ln. 50-57). In light of the teaching from Mower, it would have been

obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Imagawa by including the compact and inclinometer of Mower's in order to provide a horizontal look direction for the image capturing device and a vertical direction. The modifications thus satisfy the need to improve upon the use of maps by a remote viewer of a scene and provide a way of augmenting an image of a scene with information about the scene (Mower: Col. 1, Ln. 50-57).

With regarding **claim 21**, the claim contains the same limitations as claimed in claim 14. Therefore, claim 21 is analyzed and rejected as previously discussed in claim 14.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Takahashi (US-7,002,625) discloses a camera wherein image file name is

associated with a photographing position.

b) Endo (US-7,145,695) discloses a camera wherein image pickup area is used to classify the image into a group.

c) Cazier (US-6,657,661) discloses a camera having capturing position

associating into the image file.

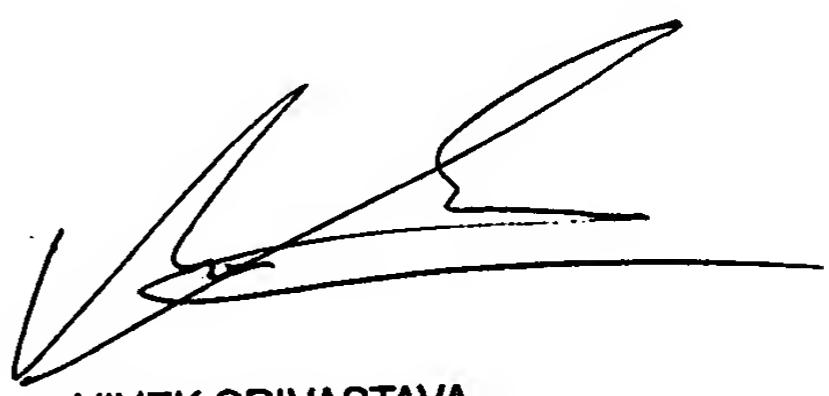
- d) Nakadai (JP09-037,203) discloses a camera wherein geographical database is retrieved based on longitude/latitude information to locate an image pickup name.
- e) Ellenby (US-5,815,411) discloses a vision system, which exploits real time position and attitude.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung H. Lam whose telephone number is 571-272-7367. The examiner can normally be reached on Monday - Friday 8AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, SRIVASTAVA VIVEK can be reached on 571-272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HL
06/10/07



VIVEK SRIVASTAVA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600